

AMENDMENTS TO THE CLAIMS

1. (CURRENTLY AMENDED) A method for determining a first and a second reference picture of a current block, comprising the steps of:

5 (A) finding in a first list a co-located picture and a block;

(B) determining in a second list a given reference picture index for said current of said block;

10 (C) mapping the in a third list a reference index to a lowest valued reference index where said given reference picture is stored in a current reference list; and

15 (D) using (i) said reference index to determine said second reference picture and (ii) said co-located picture as said first reference picture, wherein said first and said second reference pictures are used for inter-prediction of said current block.

2. (ORIGINAL) The method according to claim 1, wherein said block comprises an H.264 direct-mode macroblock or macroblock partition.

3. (ORIGINAL) The method according to claim 1, wherein step (C) further comprises:

storing a unique identifier for each reference picture,
wherein said unique identifier is associated from (i) when said
unique identifier was used as an inter-reference in the co-located
picture to (ii) when said unique identifier is made available as a
potential List0 inter-reference for the current picture.

4. (CURRENTLY AMENDED) The method according to claim 1,
further comprising the step of:

storing a unique identifier of ~~a direct mode~~ said given reference picture.

5. (CURRENTLY AMENDED) The method according to claim 4, wherein said inter-prediction direct-mode operates on (i) a macroblock when in a first configuration and (ii) a macroblock partition when in a second configuration.

6. (CURRENTLY AMENDED) The method according to claim 4,
wherein step (C) further comprises comprising the step of:

5 searching the current reference said third list for the
lowest valued reference index identified by said unique identifier
and returning the value of said lowest valued reference index.

7. (ORIGINAL) The method according to claim 1, wherein
said method further comprising the step of:

implementing an interpolative direct mode prediction and a flexible choice for the picture referenced by a finite index reference.

8. (ORIGINAL) The method according to claim 1, wherein said method is implemented in a video encoder.

9. (ORIGINAL) The method according to claim 1, wherein said method is implemented in a video decoder.

10. (CURRENTLY AMENDED) An apparatus for determining a first and a second reference picture of a current block, comprising the steps of:

means for finding in a first list a co-located picture and a block;

means for determining in a second list a given reference picture index for said current of said block;

means for mapping the in a third list a reference index to a lowest valued reference index in a current reference list where said given reference picture is stored; and

means for using (i) said reference index to determine said second reference picture and (ii) said co-located picture as said first reference picture, wherein said first and said second

reference pictures are used for inter-prediction of said current block.

11. (ORIGINAL) The apparatus according to claim 10, wherein said block comprises an H.264 direct-mode macroblock or macroblock partition.

12. (ORIGINAL) The apparatus according to claim 10, wherein said means for mapping comprises:

means for storing a unique identifier for each reference picture, wherein said unique identifier is associated from (i) when 5 said unique identifier was used as an inter-reference in the co-located picture to (ii) when said unique identifier is made available as a potential List0 inter-reference for the current picture.

13. (CURRENTLY AMENDED) The apparatus according to claim 10, further comprising:

means for storing a unique identifier of ~~a direct-mode~~ said given reference picture.

14. (CURRENTLY AMENDED) The apparatus according to claim 13, wherein said inter-prediction ~~direct-mode~~ operates on (i) a

macroblock when in a first configuration and (ii) a macroblock partition when in a second configuration.

15. (CURRENTLY AMENDED) The apparatus according to claim 13, wherein said means for mapping further comprises comprising:

means for searching ~~the current reference~~ said third list for the lowest valued reference index identified by said unique 5 identifier and returning the value of said lowest valued reference index.

16. (ORIGINAL) The apparatus according to claim 10, wherein said apparatus further comprising:

means for implementing an interpolative direct mode prediction and a flexible choice for the picture referenced by a 5 finite index reference.

17. (ORIGINAL) The apparatus according to claim 10, wherein said apparatus is implemented in a video encoder.

18. (CURRENTLY AMENDED) The apparatus method according to claim 10, wherein said apparatus is implemented in a video decoder.

19. (NEW) An apparatus comprising:

a circuit configured to (i) find in a first list of a current block a co-located picture and a block, (ii) determine in a second list a given reference picture of said block, (iii) map in 5 a third list a reference index to a lowest valued reference index where said given reference picture is stored and (iv) using (a) said reference index to determine a second reference picture and (b) said co-located picture as a first reference picture, wherein said first and said second reference pictures are used for inter-10 prediction of said current block.

20. (NEW) The apparatus according to claim 19, further comprising a memory configured to store a unique identifier for each reference picture, wherein said unique identifier is associated from (i) when said unique identifier was used as an 5 inter-reference in the co-located picture to (ii) when said unique identifier is made available as a potential List0 inter-reference for the current picture.